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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/390,299	09/03/1999	TOMIYA SASAKI	0039-7343-3S	6676

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EXAMINER

SONG, HOON K

ART UNIT PAPER NUMBER

2882

DATE MAILED: 02/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/390,299

Applicant(s)

SASAKI, TOMIYA

Examiner

Hoon K Song

Art Unit

2882

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 September 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKenna (US 5448607) in view of Tybinkowski et al. (US 5982844)

Regarding claims 1, 2, 4, 6, 8-17 McKenna teaches a gantry of an X-ray computer tomography apparatus comprising:

- an X-ray tube (figure 2);

- an X-ray detector (figure 2);

- a rotation ring mounting said X-ray tube and said X-ray detector (figure 2);

- a ring frame rotatably supporting said rotation ring (figure 2);

- a base (figure 2);

- a plurality of posts (wall, 20, 22) vertically mounted on said base and supporting said ring frame such that said rotation ring is positioned between said main posts (figure 2);

- a plurality of props (wall, 20, 22) extending obliquely between said walls for reinforcing said walls under the rotation ring; and

at least one electric member positioned in a space surrounded by said base, main posts and props (wall, 20, 22), said at least one electric member including at least one of a power source unit configured to generate driver power to rotate said rotation ring and tilt said ring frame, a scan control unit configured to control a rotating operation of said rotation ring and a detecting operation of said X-ray detector, and a transmission unit configured to externally output a signal detected by said X-ray detector (a gantry tilt control mechanism, column 6 line 24+).

However McKenna merely teaches that the wall has internal structure having main posts and props.

Tybinkowski teaches the main post and the props (figure 2).

In view of Tybinkowski, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to design the internal structure of the wall having the main posts and props to rigidly support the rotating gantry (figure 2) because the walls are not made of one solid piece of material rather having space inside to dispose operating members which was taught by McKenna above. Accordingly, one would be motivated to adopt the internal structure of the wall having posts and props because it would save material compare to solid piece while rigidly supporting the rotating gantry (figure 2).

Regarding claim 3, McKenna merely teaches that the base comprises outside frames, inside frames and cross bars provided inside the frame.

Tybinkowski teaches the frames.

In view of Bailey, one would be motivated to adopt those frames because it would provide more rigid support for the rotating gantry (figure 2a)

Regarding claim 5, McKenna teaches that the props (walls, 20, 22) are mounted on a central portion of the base (figure 1).

Regarding claim 7, McKenna teaches that the two props (walls) are arranged to form an inverted V shape inward from the main post (figure 1).


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoon K Song whose telephone number is 703-308-2736. The examiner can normally be reached on 8:30 AM - 5 PM, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on 703-305-3492. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-4858 for regular communications and 703-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Hoon K. Song
February 20, 2003


Hoon K. Song
2003